

## IN THE CLAIMS

1. (Currently amended) A centring centering drum for filter assembly machines,

the centring centering drum (1) comprising:

a substantially cylindrical shell (7) having rotatable about a longitudinal axis (2) and  
defining a transverse reference plane (T), and rotating about said longitudinal axis (2);

a succession plurality of seats (12) formed, parallel to and equally spaced from said  
longitudinal axis (2), on the outside of said shell (7) and equally spaced about said  
longitudinal axis (2); wherein each of said seats (12) receives being dimensioned and adapted  
to receive a respective filter portion (5), and at least some of said filter portions (5) are in an  
offset position offset laterally, along the relative said seats (12); with respect to said reference  
plane (T); and

centring centering means (28) which act on for moving each laterally offset filter  
portion (5) to centre it, along the relative respective seat (12), from the offset position to a  
center position to center the filter portion with respect to said reference plane (T);

wherein the centring centering means (28) are is fitted to said shell (7) to rotate with  
the shell (7) about said longitudinal axis (2), and comprises a plurality of stop members (40),  
each of the stop members being, for each said seat (12), a stop member (40) located adjacent  
to a respective seat (12) on a respective side of said reference plane (T) to define a centred the  
centered position of the relative said respective filter portion (5), and push means (29) for  
moving each of the relative said filter portions (5) axially onto the relative said respective  
stop member (40);

the centring drum is characterized in that wherein the stop members (40) includes a  
first group of stop members disposed on a first side of said reference plane (T) and a second

group of stop members disposed on a second side of said reference plane (T) opposite said first side, the first and second groups of stop members being alternately disposed on the opposite sides of said reference plane (T) such that if a first seat is engaged by a stop member of the first group, then the adjacent seats are engaged by stop members of the second group; define a first and a second succession (41, 42) of stop members (40), which successions (41, 42) are located on opposite sides of said reference plane (T) and are intercalated so as if one seat (12) is engaged by a stop member (40) of a succession (41, 42), the two adjacent seats (12) are engaged by two stop members (40) of the other succession (42, 41); and

wherein adjusting means (31) are is provided to move the first and second groups of stop members said two successions (41, 42) equally and oppositely along said longitudinal axis (2) with respect to said reference plane (T).

2. (Currently amended) A drum as claimed in claim 1, wherein said push means (29) are is pneumatic means.

3. (Currently amended) A drum as claimed in claim 1, wherein said push means (29) are is suction means which come out inside the relative said seat (12), on the same side of said reference plane (T) as the relative said stop member (40).

4. (Original) A drum as claimed in claim 1, wherein each said stop member (40) comprises a finger (40) housed in axially sliding manner inside the relative said seat (12), and having an end surface (43) facing said reference plane (T) and defining a stop surface for the relative said filter portion (5).

5. (Currently amended) A drum as claimed in claim 4, wherein said push means (29) are is suction means which come out inside the relative said seat (12) at said end surface (43).

6. (Currently amended) A drum as claimed in claim 5, wherein said push means (29) comprisess a suction hole (37) which comes out inside the relative said seat (12), beneath the relative said finger (40); and a groove (44) formed along said finger (40), communicating with the relative said suction hole (37), and terminating at said end surface (43).

7. (Currently amended) A drum as claimed in claim 1, wherein the stop members (40) in each of the first and second groups ~~said succession~~ are integral with one another.

8. (Currently amended) A drum as claimed in claim 4, wherein said first and said second groups of stop members ~~said succession~~ (41, 42) respectively comprise a first and a second annular body (38, 39) which are coaxial with said longitudinal axis (2), are located axially outwards of said seats (12) and on opposite sides of said reference plane (T), and connect the relative said fingers (40) to one another; said first and said second annular body (38, 39) being movable axially with respect to said shell (7), and being fitted to said adjusting means (31).

9. (Currently amended) A drum as claimed in claim 8, wherein said adjusting means (31) comprisess at least one first screw-nut screw coupling (52), in turn comprising a screw (50) extending parallel to said longitudinal axis (2), and a nut screw (51) formed

through said first annular body (38); at least one second screw-nut screw coupling (58) operating in the opposite direction to said first screw-nut screw coupling (52), and in turn comprising a screw (56) extending parallel to said longitudinal axis (2), and a nut screw (57) formed through said second annular body (39); and a ring gear (47) coaxial with said shell (7) and mounted to rotate, with respect to said shell (7), about said longitudinal axis (2); each said screw (50; 56) being fitted integrally with a relative pinion (48; 49); each said pinion (48; 49) meshing with said ring gear (47), and actuating means (59) being provided to impart to said ring gear (47) a given, adjustable rotation about said longitudinal axis (2).

10. (Currently amended) A drum as claimed in claim 1, wherein said filter portions (5) ~~define a~~ are double filters (5) for cigarettes.